THE APHID GENUS FLABELLOMICROSIPHUM IN UTAH[1]

BY CLYDE F. SMITH[2]

Genus FLABELLOMICROSIPHUM G. & P.

Gillette and Palmer; Ann. Ent. Soc. Amer., 25: 472, 1932.

The genus *Flabellomicrosiphum* may be characterized as follows: Vertex slightly convex; frontal tubercles but slightly developed, not noticeably exceeding vertex; secondary sensoria circular; cornicles merely raised pores; cauda elongate, conical or cylindrical; anal plate rounded; hairs broadly flabellate; rostrum with terminal joint indistinct; ocular tubercles indistinct; lateral tubercles not evident; wing venation as in the genus *Aphis*.

KEY

Unguis more than 2x base; femur dark.....*knowltoni* n. sp.
Unguis less than 2x base; femur light.....*tridentatæ*

FLABELLOMICROSIPHUM TRIDENTATÆ (Wilson) [genotype]

Wilson, Trans. Am. Ent. Soc., 41: 89, 1915 (*Chaitophorus*)

Apterous vivipara. Pale green, appearing frosted due to the numerous fan-shaped hairs, 0.045 to 0.056 mm. long on the vertex and 0.034 to 0.045 on the sides of the abdomen; body 0.94 to 1.43 mm. long to base of cauda; antennæ pale, 0.47 to 0.69; antennal III, 0.086 to 0.145; IV, 0.06 to 0.094; V, 0.078 to 0.125; VI, 0.06 to 0.094 plus 0.08 to 0.157; rostrum surpassing second coxæ; rostral IV plus V, 0.08 to 0.114 mm. long and needle like; hind tibiæ 0.33 to 0.5; hind tarsi 0.08 to 0.11; cornicles slightly truncate to hardly more than raised pores without flanges; cauda 0.12 to 0.17 mm. long.

Collections: On *Artemisia*, the usual species being *tridentata*.

Utah: Beaver, August 8, 1936 (G. F. Knowlton, Smith); Beaver Dam, June 3, 1927 (Knowlton); Blue Bench, August 17, 1935 (Knowlton); Blue Creek, May 25, 1927 (Knowlton), and August 1, 1936 (Knowlton, Smith); Clover, April 30, 1936 (Knowlton); Collinston, June 3, 1937 (Knowlton); Cornish, August 9, 1927 (Knowlton); Hansel's Mountains, May 19, 1927 (Knowlton); Honeyville, July 19, 1927 (Knowlton); Howell, May 25, 1927 (Knowlton); Howell, August 1, 1936 (Knowlton, Smith); Kanab, August 10, 1936 (Knowlton, Smith); Lampo, August 1, 1936

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(Knowlton, Smith); Manti, May 7, 1927 (Knowlton); Nephi, August 7, 1936 (Knowlton, Smith); Parowan, August 8, 1936 (Knowlton, Smith); Promontory, August 1, 1936 (Knowlton, Smith); Rattle Snake Pass, May 25, 1927 (Knowlton); Tropic, August 10 1936 (Knowlton, Smith); Thatcher, August 1, 1936 (Knowlton, Smith); Zion National Park, August 9, 1936 (Knowlton, Smith). Also collected at Yankey Jim Canyon, Idaho, June 12, 1936 (Crystle K. Smith), and at Palisades, Colorado, August 24, 1935 (Knowlton).

Flabellomicrosiphum knowltoni Smith, n. sp.

Apterous vivipara. Color dull, slaty to pinkish, overlaid with pale hairs which give it a frosted appearance; body 0.96 to 1.5 mm. long to base of cauda and bearing numerous spatulate hairs; hairs on vertex 0.04 to 0.056 mm. long; hairs on abdomen 0.026 to 0.045; antennæ slightly dusky, 0.66 to 1.12; antennal III, 0.13 to 0.25; IV, 0.08 to 0.16; V, 0.11 to 0.19; VI, 0.07 to 0.11 plus 0.25 to 0.28; rostrum attaining third coxæ; rostral IV plus V, 0.11; femora dark; hind tibiæ dusky, 0.4 to 0.68 mm. long and bearing blunt to pointed hairs 0.034 mm. long; hind tarsi 0.08 to 0.11; cornicles dusky, merely raised pores, 0.02 mm.; cauda dark, 0.11 to 0.17 mm. long for hard portion, 0.16 to 0.21 total length and bearing two to three pairs of lateral hairs and three to four dorsal or dorso-lateral hairs.

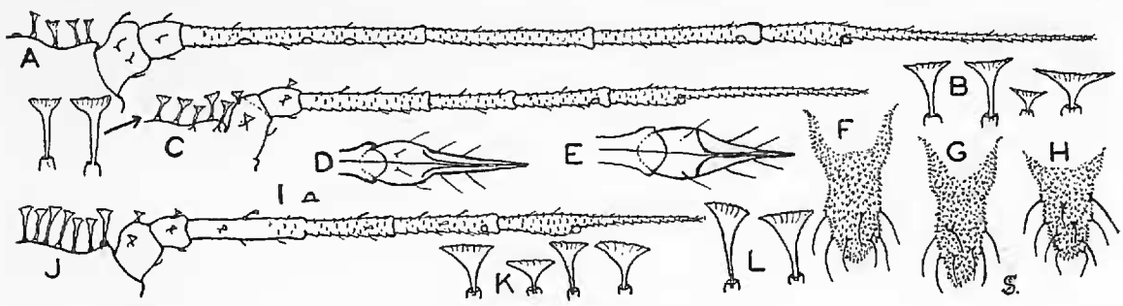
Alate vivipara. Color slightly darker than aptera; body 1.4 mm. long to base of cauda; antennæ dusky, 1.19; antennal III, 0.3 mm. long and bearing 4 sensoria; IV, 0.2; V, 0.2; VI, 0.094 plus 0.28; rostrum surpassing second coxæ; rostral IV plus V, 0.11; femora dark; hind tibiæ dusky, 0.77; hind tarsi 0.11; cornicles merely raised pores; cauda 0.125 for hard portion, 0.19 total length.

This species differs from *Flabellomicrosiphum tridentatæ* (Wilson) in being slaty colored and having dusky to black coxæ, trochanters and femora; unguis being more than 2x base; rostrum attaining third coxæ; rostral IV plus V longer than base of antennal VI; and antennæ more than one-half the length of the body.

In Utah on *Artemisia tridentata* at source of Logan City drinking water system, Logan Canyon (type locality), July 4, 1936 (alate and aptera) (Smith), July 30 and August 23, 1936 (Smith, M. W. Allen, F. C. Harmston); Brigham, August 12, 1936 (G. F. Knowlton, Smith); Cedar Valley, May 10, 1936 (Knowlton, Smith); 5 miles north of Kanab, August 10, 1936 (Knowlton, Smith); mouth of Mueller's Park, July 2, 1935 (Knowlton), and

August 12, 1936 (Knowlton, Smith); Salt Lake City, April 25, 1936 (Smith); Spring City, August 11, 1936 (Knowlton, Smith).

Type in the U. S. National Museum. Paratypes in the G. F. Knowlton collection, and in the collection of the writer.



LEGEND

Fig. 1.—*Flabellomicrosiphum knowltoni* n. sp. Alata, A, F; Aptera, B-D, G, I; B, body hairs; I, cornicle. *F. tridentatæ* (Wilson). Aptera, E, H, J-L; K, body hairs; L, hairs on vertex.

A NOTE ON GYRINID BEETLES FROM ESCUINTLA, GUATEMALA

BY F. X. WILLIAMS

The Gyrinidæ or Whiligig beetles are spectacular performers upon the surface of the water, and a company of these highly polished insects circling swiftly and in close formation upon a quiet pool, is something to look at and admire. In the well-shaded little Guachimtempeque stream a large gyrinid of the genus *Dineutes* was quite plentiful. Measuring up to nearly ¾ of an inch long, broadly oval, convex, with the outer sides of the prothorax and of the wing covers flared so as to form a sort of gunwale, gleaming like burnished metal, each individual of the flotilla moves as if propelled by a powerful motor as with rapid strokes of short, paddle-like legs that are quite invisible from above, it glides in swift and graceful curves among its fellows. Or, undisturbed, the beetles ride carefree upon placid waters, or else there is lazy motion among them but, if alarmed there is tremendous and powerful activity; lightning-like gyrations, or the company breaks up, some dashing off to another part of the pool while others dive and swim swiftly under water.

In captivity we may study their curbed activities at closer range. There are lazy or swift movements, or a lull of a few moments. We note a curved fringe of white hair bordering the front of the head at the water line and that together with the very short antennæ may serve to inform the insect when it collides with something good to eat Its vision is excellent, the compound